Editorial Section

RATIONALITY IN THE CONTROL OF MEASLES.

In its broadest aspect the progress of sanitation is a constant warfare, not only against the causes of disease, but also against the intrenchments which they have occupied in our own territory of tradition. The discovery and use of new and better weapons has resulted, it is true, in the regaining and refortifying of much of that territory, especially in the conspicuous major regions of attack. But, at the same time, better information and strategy point out the necessity for activity in certain fields formerly little considered. Take, for example, measles, classed conventionally as a "minor contagious disease." Regarded with indifference or contempt, its visitation has traditionally been accepted by parents as an incident of childhood almost as common and unavoidable as teething. Doctors, too, have shared this attitude. Health officials, seeing attempts at control by ordinary methods swamped in periodical epidemics, have either abandoned the matter to simplé *laissez-faire* or dismissed it with arbitrary routine regulations—perhaps with some educational publicity.

But the warning voice of the statistician has been heard, indicting measles (with its congener whooping cough) as an arrant mischief-maker and mortality-producer. The United States Census mortality statistics, for example, show that measles, the "minor" communicable disease, ranks in mortality with scarlet fever of the "major" group. In communities where diphtheria is under the best control it may even vie with that disease. The figures for the Registration Area indicate that on the average there are, in the whole United States, not far from 10,000 deaths a year ascribed to measles, not to speak of untabulated effects of a morbidity of unnumbered cases.

Despite the frequent occurrence of epidemics of measles it is significant of pessimism that few attempts have been made to secure from them data on which

to base measures of control. Now, however, there comes to hand a thorough study of an epidemic of 254 cases at Palo Alto, California, by the health officer of that city, Mr. H. F. Gray, which again raises, and, furthermore, greatly assists in clarifying the whole matter. The data secured, together with reference to existing experimental data and regulations, are set forth in a paper, appearing in the recent November number of the *Journal of Infectious Diseases*, which merits the close consideration of every health officer. The affirmation, in this paper, of the value of isolation; the fresh data on periods of incubation and infectivity; the advocacy of a just, scientifically determined duration of quarantine; and the description of a method of attack, through the definite coöperation of parents and school-teachers, on the difficult problem of early recognition of the disease: are all points of prime importance. To attempt to summarize further here would be to distract attention from the significant details of the study itself. Its sum total in effect is the conclusion that definite rational measures are possible in the control, even though partial, of a disease which has too commonly and too long been regarded as an insoluble if not a negligible public health problem.

PELLAGRA.

From earliest times in the history of pellagra, diet has been held to play an important rôle in the disease. The dietary theories have been numerous and varied and have for the most part concerned themselves with corn. The best known of these is the spoiled maize theory of Lombroso which forms the basis of the Italian government's efforts to eradicate the disease. In this country, this as well as other food theories have found but small favor. Indeed, until within about a year, the trend of American opinion was strongly in favor of the view that pellagra is an infectious disease. The investigations of the Public Health Service during the past year would seem to make this view almost if not quite wholly untenable; they present a dietary conception of the disease that seems strikingly analogous to that of beriberi.

In accordance with his epidemiologic findings in 1914,* Goldberger suggested that it might be well to attempt to prevent the disease by providing those subject to pellagra with a diet such as that enjoyed by well-to-do people, who as a class are practically free from the disease, in other words to modify the diet, of the group or class affected, by reducing the proportion of the cereals, vegetables and canned foods and increasing that of the fresh animal foods, such as fresh meats, eggs and milk, in their diet.

A test of the preventive value of diet based on this proposal has been carried on for a year at two orphanages in Mississippi and at the Georgia State Sanitarium. Goldberger, Waring and Willets summarize their report† of this work as follows:

1. The diet at two orphanages, "M. J." and "B. J.," for several years endemic foci of pellagra, was modified in accordance with the directions of the writers in September, 1914. Hygienic and sanitary conditions have remained unchanged.

2. The modification in the diet consisted principally of a marked increase in the fresh animal and the leguminous protein foods.

3. Since the change in diet at orphanage "M. J.," there has not been observed any recognizable evidence of a recurrence in any of the pellagrins of 1914, 67 of whom remained under observation until they had completed at least the anni-

* U. S. Public Health Reports, Oct. 23, 1914.

† U. S. Public Health Reports, Oct. 22, 1915.